Remarks

Applicants acknowledge the Examiner's indication of Claims 4-7, 9, 13-16, 18 and 19 as being allowable.

Applicants have amended Claim 19 to comply with the Examiner's requirement of form. Claims 8 and 11 have been amended as to form, in particular, to correct typographical errors.

35 USC § 112 requirements

It is noted and acknowledged that the Examiner has withdrawn his rejection under 35 USC §112. The expression "at least partially dispense with the macrodiversity" is thus considered clear, definite and described in such a way as to enable one skilled in the art to make and/or use the invention.

It is reminded that "at least partially dispense with macrodiversity" means completely dispense with macrodiversity (i.e. renouncing to the macrodiversity mode) OR partially dispense with macrodiversity (i.e. renouncing to receive the same information from at least one base station, but not all the base stations, of said plurality of base stations). Both situations are covered by the current independent claims.

This is fully recited in the current independent claims. For example, Claim 1 recites that one or more base stations are controlled to send to the mobile station at least two radio signals carrying different sets of information and that the mobile station is controlled to have its receiving units (initially in macrodiversity mode) process these radio signals so as to receive said different sets of information.

Where all the base stations are controlled to send radio signals carrying different sets of information, the macrodiversity is completely dispensed with. By contrast, where only some of

the base stations are controlled to send radio signals carrying different sets of information (some others sending identical information), the macrodiversity is partially dispensed with.

Rejection under 35 USC § 103

It is understood that the Examiner considers the subject-matter of Claim 1 (in its "completely dispense with macrodiversity" branch) as being obvious over Zhou (US 6,539,009) in view of Okawa (US 6,842,442).

According to the Examiner, Zhou would teach that the macrodiversity mode be dispensed with, since one base station would be selected after a mobile station was in macrodiversity mode with several base stations initially.

The Examiner also acknowledges that Zhou does not explicitly teach that one or more base stations be controlled to send to the mobile station at least two radio signals carrying different sets of information and that the mobile station be controlled to have its receiving units process these radio signals so as to receive said different sets of information. Nevertheless, he considers that these features would be disclosed in Okawa and that it would have been obvious for one skilled in the art to incorporate them into Zhou's system.

Okawa discloses a DS-CDMA transmission method using code multiplexing, in which pilot symbols are inserted into information symbols, the pilot symbols being spread using spreading codes other than the ones assigned to the information symbols (see claim 1). In this way, the transmission is said to improve the accuracy of the channel estimation (col.2, l.38-42).

The transmitter disclosed by Okawa, as shown in FIG.5, uses several channels (CH-1, CH-2,..., CH-N) each carrying information coded with a respective spreading code (SC-1, SC-2,..., SC-N) and some or all of which carrying pilot symbols coded with a particular spreading

code (SC-X). Accordingly, the receiver disclosed by Okawa, as shown in FIG.6, uses several matched filters corresponding to the spreading codes.

In this, the receiver of Okawa could be considered as having different receiving units arranged for receiving different information (actually subsets of common information).

However, this is the normal and single mode of operation in Okawa. It is not disclosed, in Okawa, that any other mode of operation could be carried out by the transmitter and/or the receiver. In particular, it is not taught that the receiver could be in a macrodiversity mode. The macrodiversity mode would thus be incompatible with the normal operation of the transmitter and the receiver of Okawa. A fortiori, it is not disclosed in Okawa that the reception of different information by respective receiving units of the receiver would be triggered when specified conditions are fulfilled.

Back to the teaching of Zhou and even when adopting the interpretation of Zhou made by the Examiner, it should be noted that macrodiversity is dispensed with to make a communication continue with a newly determined base station for which a peak has been detected. This is a classical case of handover from a plurality of base stations to a single base station. It does not have any other motivation than choosing a better base station, in terms of electrical power ("peak"), for continuing the communication in progress (see col.7, l.17-36).

One skilled in the art knowing the teaching of Zhou would thus perform a handover to a base station having a good level, without any consideration to the mode of operation of this base station. As for traditional handovers, the target base station should present the same data rate as the previous base stations (because the communication is unchanged but only switched to

another base station), so that the base station switch is transparent to the user of the mobile station.

There is no reason why the handover should target a base station using code multiplexing as disclosed in Okawa, provided that it would be possible i.e. that the radio controller controlling the handover would be aware of the mode of operation of every potential target base station. There is no incitement for this either in Zhou or in Okawa.

Even if the communication in progress has a high data rate, a base station using a single spreading code for said communication could be sufficient. Precisely, every base station with which the mobile station was in communication initially in macrodiversity mode according to Zhou uses a single spreading code.

Therefore, one skilled in the art would not have been incited to modify the system of Zhou to choose a target base station using code multiplexing as disclosed in Okawa, when measuring peaks from candidate base stations.

For these reasons, the subject-matter of claim 1 of the present application is new and non-obvious over Zhou in view Okawa. The same applies to claims 10 and 19. The other claims are acceptable as well, in particular since they depend on an acceptable independent claim, directly or indirectly.

February 10, 2006

Respectfully submitted,

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